

CLAIMS

What is claimed is:

- Sub 1
1. A method of authorizing a purchase to be made over a computer network using a number that identifies a consumer's account from which funds will be withdrawn to pay a purchase price and an authorization token associated with said number which, when used with said number, enables withdrawal of funds from said account, said method comprising
- 5 the steps:
- transmitting said number electronically over said network from a consumer location to an on-line merchant location;
- forwarding said number electronically from said on-line merchant location to a third party contractor location;
- 10 determining at said third party contractor location an authentication token type associated with said number;
- prompting a consumer at said consumer location to electronically transmit an authentication token in accordance with said determined authentication token type over said network to said third party contractor location;
- 15 transmitting said authentication token electronically over said network from said consumer location to said third party contractor location; and
- determining at said third party contractor location whether said number and said authentication token are valid.

2. The method according to claim 1 wherein said on-line merchant location is bypassed when said authentication token is transmitted over said network from said consumer location to said third party contractor location.

Sub 117 3. ~~The method according to claim 1 wherein said number and said authentication token are transmitted via encrypted connections.~~

4. The method according to claim 1 wherein said network is the Internet and wherein said number is electronically transmitted from said on-line merchant location to said third party contractor location over the Internet.

5. The method according to claim 1 wherein said number is electronically transmitted from said on-line merchant location to said third party contractor location over a private computer network.

Sub K3 6. ~~The method according to claim 1 wherein said number is electronically transmitted from said on-line merchant location to said third party contractor location over a direct connection between the on-line merchant location and the third party contractor location.~~

7. The method according to claim 1 including the additional step of determining at said third party contractor location whether said account has sufficient funds to cover said purchase price.

8. The method according to claim 1 including the additional step of electronically transmitting a message from said third party contractor location to said on-line merchant location indicating whether said number and said authentication token are valid.

9. The method according to claim 7 including the additional step of electronically transmitting a message from said third party contractor location to said on-line merchant location indicating whether there are sufficient funds in said account to cover said purchase price.

10. The method according to claim 1 including the additional step of electronically transmitting a message over said network from said on-line merchant location to said consumer location indicating whether said purchase has been authorized.

11. The system according to claim 1 wherein said authentication token type is at least one of a personal identification number, a biometric signature, an authorization code stored on a smart card, or a password.

12. A system for authorizing a purchase to be made over a computer network using a number that identifies a consumer's account from which funds will be withdrawn to pay a purchase price and an authentication token associated with said number which, when used with said number, enables withdrawal of funds from said account, said system comprising:

5 a first computer at a consumer location, said first computer being connected to said network;

a second computer at an on-line merchant location, said second computer being connected to said network; and

a third computer at a third party contractor location, said third computer being
10 connected to said network;

said first computer being configured to (1) transmit said number over said network to said second computer and (2) transmit said authentication token over said network to said third computer;

said second computer being configured to forward said number received from said
15 first computer to said third computer; and

said third computer being configured to (1) determine an authentication token type associated with said number; (2) prompt said first computer to transmit an authentication token in accordance with said determined authentication token type over said network, and (3) determine whether said number and said authentication token are valid.

13. The system according to claim 12 wherein said first computer bypasses said second computer when transmitting said authentication token to said third computer.

14. The system according to claim 12 wherein said number and said authentication token are transmitted via encrypted connections.

15. The system according to claim 12 wherein said network is the Internet and wherein said number is transmitted from said second computer to said third computer over the Internet.

16. The system according to claim 12 wherein said number is transmitted from said second computer to said third computer over a private computer network.

17. The system according to claim 12 wherein said number is transmitted from said second computer to said third computer over a direct connection between the second computer and the third computer.

18. The system according to claim 12 wherein said third computer is further configured to determine whether said account has sufficient funds to cover said purchase price.

19. ~~The system according to claim 12 wherein said third computer is further configured to notify said second computer whether said number and said authentication token are valid.~~

20. The system according to claim 18 wherein said third computer is further configured to notify said second computer whether there are sufficient funds in said account to cover said purchase price.

21. The system according to claim 12 wherein said second computer is further configured to notify said first computer whether said purchase is authorized.

22. ~~The system according to claim 12 wherein said authentication token type is at least one of a personal identification number, a biometric signature, an authorization code stored on a smart card, or a password.~~

23. A method of authorizing a purchase to be made over a computer network using a number that identifies a consumer's account from which funds will be withdrawn to pay a purchase price and an authentication token associated with said number which, when used with said number, enables withdrawal of funds from said account, said method comprising

5 the steps:

receiving at a third party contractor location said number electronically transmitted from an on-line merchant location;

determining at said third party contractor location an authentication token type associated with said number;

10 prompting a consumer at a consumer location to electronically transmit over said network to said third party contractor location an authentication token in accordance with said authentication token type;

receiving at said third party contractor location said authentication token electronically transmitted over said network from said consumer location; and

15 verifying the validity of said number and said authentication token at said third party contractor location.

24. The method according to claim 23 wherein said network is the Internet and wherein said number is electronically transmitted from said on-line merchant location to said third party contractor location over the Internet.

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25. The method according to claim 23 wherein said number is electronically transmitted from said on-line merchant location to said third party contractor location over a private computer network.

26 The method according to claim 23 wherein said number is electronically transmitted from said on-line merchant location to said third party contractor location over a direct connection between the on-line merchant location and the third party contractor location.

27. The method according to claim 23 including the additional step of determining at said third party contractor location whether said account has sufficient funds to cover said purchase price.

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28. The method according to claim 23 including the additional step of electronically transmitting a message from said third party contractor location to said on-line merchant location indicating whether said number and authentication token are valid.

29. The method according to claim 27 including the additional step of electronically transmitting a message from said third party contractor location to said on-line merchant location indicating whether there are sufficient funds in said account to cover said purchase price.

30. The method according to claim 23 wherein said authentication token type is at least one of a personal identification number, a biometric signature, an authorization code stored on a smart card, or a password.

31. A system for authorizing a purchase to be made over a computer network using a number that identifies a consumer's account from which funds will be withdrawn to pay a purchase price and an authorization token associated with said number which, when used
5 with said number, enables withdrawal of funds from said account, said system comprising:
a computer connected to said network;
said computer being configured to receive said number transmitted from an on-line merchant's computer, determine an authentication token type associated with said number, prompt a consumer's computer to transmit over said network an authentication token to said
10 computer in accordance with said authentication token type, receive said authentication token transmitted over said network from said consumer's computer, and verify the validity of said number and said authentication token.

32. The system according to claim 31 wherein said network is the Internet and wherein said number is transmitted from said on-line merchant's computer to said computer over the Internet.

33. The system according to claim 31 wherein said number is transmitted from said on-line merchant's computer to said computer over a private computer network.

34. The system according to claim 31 wherein said number is electronically transmitted from said on-line merchant's computer to said computer over a direct connection between the on-line merchant computer and said computer.

35. The system according to claim 31 wherein said computer is further configured to determine whether said account has sufficient funds to cover said purchase price.

36. The system according to claim 31 wherein said computer is further configured to notify said on-line merchant's computer whether said number and authentication token are valid.

37. The system according to claim 35 wherein said computer is further configured to notify said on-line merchant's computer whether there are sufficient funds in said account to cover said purchase price.

38. The system according to claim 31 wherein said authentication token type is at least one of a personal identification number, a biometric signature, an authorization code stored on smart card, or a password.